

**SUBJECT-MATHEMATICS, CLASS – IX**  
**CHAPTER 8-(HERON’S FORMULA)**  
**WORKSHEET (ADVANCED)**

**Each question carries 1 mark**

1. The length of the perpendicular drawn on the smallest side of scalene triangle is  
(a) Largest      (b) Smallest      (c) No relation      (d) None
2. If each side of a scalene  $\Delta$  is doubled then the area would be increased by  
(a) 300%      (b) 50%      (c) 25%      (d) None of these
3. The perimeter of an isosceles right triangle is  $5(2+\sqrt{2})$  cm. Its area is  
(a)  $5\text{cm}^2$       (b)  $10\text{cm}^2$       (c)  $12.5\text{cm}^2$       (d)  $25\text{cm}^2$
4. The sides of a triangle are 35cm, 54 cm and 61 cm respectively. The length of its longest altitude is  
(a)  $16\sqrt{5}$  cm      (b)  $10\sqrt{5}$  cm      (c)  $24\sqrt{5}$  cm      (d) 28 cm

**Short answer type-I ( 2 marks each)**

5. The area of an isosceles triangle is  $12\text{cm}^2$  and the base is 8 cm in length. Find its perimeter.
6. The hypotenuse of an isosceles right triangle is 10 cm. Find its area.
7. The base of an isosceles triangle measures 24 cm and its area is  $192\text{cm}^2$ . Find its perimeter.

**Short answer type-II (3 marks each)**

8. If each side of an equilateral triangle is tripled then what is the percentage increase in the area of the triangle?
9. The area of a rhombus is 72 sq. cm. If one of the diagonal is 18 cm long, find the length of the other diagonal.

**Long answer type question ( 4 marks each)**

10. The area of an isosceles triangle is  $60\text{cm}^2$  and the length of its equal sides is 13 cm. Find its base.